

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) An apparatus to support a stent during a process of coating the stent with a coating substance, comprising a first member and a second member, the first member including a plurality of pores disposed on a stent support surface of the first member, the pores capable of receiving a coating substance during the coating process, the pores having an open end and a closed end so as to provide a closed pore system on the stent support surface of the first member, the second member having a stent support surface facing the stent support surface of the first member.
2. (previously presented) The apparatus of Claim 1, wherein the pores have a diameter from about 0.2 microns to about 50 microns.
3. (canceled)
4. (previously presented) The apparatus of Claim 1, wherein the stent support surface of the first member is made from a metallic material.
5. (previously presented) The apparatus of Claim 1, wherein the stent support surface of the first member is made from a polymeric material.
6. (previously presented) The apparatus of Claim 5, wherein the polymeric material is selected from the group consisting of regenerated cellulose, cellulose acetate, polyacetal, polyetheretherketone, polyesters, highly hydrolyzed polyvinyl alcohol, nylon, polyphenylenesulfide, polyethylene, polyethylene terephthalate, polypropylene, and combinations thereof.

7. (previously presented) The apparatus of Claim 1, wherein the stent support surface of the first member is made from a ceramic material.

8-24. (canceled)

25. (previously presented) The apparatus of Claim 4, wherein the metallic material is selected from the group consisting of stainless steel, titanium, tantalum, niobium, zirconium, hafnium, and cobalt chromium alloys.

26. (previously presented) The apparatus of Claim 7, wherein the ceramic material is selected from the group consisting of zirconia, silica, glass, sintered calcium phosphates, calcium sulfate, and titanium dioxide.

27. (previously presented) A mounting assembly to support a stent during the application of a coating composition onto the stent, comprising a first element to make contact with one side of a stent, and a second element to make contact with another side of the stent, the first and second elements capable of being moved relative to each other to secure and release a stent, wherein the first element and/or the second element includes a layer to absorb a coating composition that comes into contact with the layer during the application process.

28. (previously presented) The mounting assembly of Claim 27, wherein the layer is a sponge.

29. (previously presented) The mounting assembly of Claim 27, wherein the first and/or second element is made from a metallic material, a polymeric material or a ceramic material.

30. (previously presented) The mounting assembly of Claim 27, wherein the first and/or second element has a conical shape.

31. (previously presented) A support assembly to support a stent during a process of coating the stent with a composition, comprising a first element to make contact with one side of a stent, and a second element to make contact with another side of the stent, the first and second elements capable of being moved relative to each other to secure and release a stent, wherein the first element and/or the second element includes an absorbing layer disposed on the surface of the first element and/or the second element for at least partially absorbing some of the composition that comes into contact with the absorbing layer.

32. (previously presented) A support assembly to support a stent during a process of coating the stent with a composition, comprising a first element to make contact with one side of a stent, and a second element to make contact with another side of the stent, the first and second elements capable of being moved relative to each other to secure and release a stent, wherein the first element and/or the second element is made from an absorbent material for at least partially absorbing some of the composition that comes into contact with the first element and/or the second element.

33. (previously presented) The apparatus of Claim 1, wherein the stent support surface of the first member has been subjected to surface treatment to increase the capillary permeation of the coating substance with respect to the stent support surface as compared to no surface treatment, the surface treatment selected from the group consisting of plasma treating, corona treating, chemical oxidation, and etching.

34. (previously presented) The apparatus of Claim 1, wherein the stent support surface of the first member has a conical shape, and wherein when a tubular stent having a lumen is mounted on the apparatus, a portion of the stent support surface of the first member enters the lumen of the stent.

35. (previously presented) The apparatus of Claim 1, further comprising a third member disposed between and connected to the first and second members, wherein when a tubular stent having a lumen is mounted on the apparatus, the first and second members contact opposite ends of the stent and the third member extends through the lumen of the stent without contacting the stent.

36. (previously presented) The apparatus of Claim 1, further comprising a third member disposed between and connected to the first and second members, wherein the stent support surface of the first member and the stent support surface of the second member are individually in the shape of a cone having a narrowed portion and a widened portion wider than the narrowed portion, and the third member extends from the narrowed portion of the stent support surface of the first member to the narrowed portion of the stent support surface of the second member.

37. (previously presented) The apparatus of Claim 1, wherein the first member is connected to a motor capable of rotating the first member or of translating the first member.